6 February 2003

Marlene H. Dortch, Secretary
Federal Communications Commission
Washington, D.C. 20554

Re: WT Docket No. 01-309. Petition for Revision of FCC Part 24.232

Dear Ms. Dortch:

Self Help for Hard of Hearing People (SHHH) sends these comments in support of Myers Johnson Inc. (MJI) petition for revision of FCC Part 24.232. The petition requests a change in FCC rule Part 24.232, 47 CFR 24.232, to allow innovative use of directional antennas with wireless phones.

SHHH is a national consumer organization with 13 state organizations and 250 chapters nationwide. SHHH is actively involved in the hearing aid/wireless telephone compatibility issue, as it is critical to our constituents who use hearing aids and cochlear implants and must have access to the 21st century phone system.

MJI maintains that through the use of directional antenna technology, the fields directed toward the user can be dramatically reduced, allowing the hearing aid to function with greatly reduced or eliminated RF interference. MJI's independent tests showed reduction of RF energy toward the hearing aid. Starkey Laboratories conducted their own tests of a directional antenna and confirmed that the adverse effects of RF interference on hearing aids can be significantly reduced.

Recent efforts to immunize hearing aids by as much as 15dB are not retroactive and thus many hearing aids that cost anywhere from $1000 - $3000 will be in use for many more years. Cochlear implant processors are even more expensive and less likely to be replaced or immunized in the near future. Directional antennas could be a significant method for reducing RF emissions to such hearing devices.

It is important to note, however, that directional antennas will not completely solve the interference problem. This is because wireless phones emit two kinds of interference, RF and non-RF interference. Though directional antennas may reduce the adverse effects of RF interference, they will do nothing to remove the magnetic interference in the phone

from pulsating battery currents. Other methods will be needed to address this non-RF interference. Some of those technical solutions are feasible today and were submitted to the public record on this proceeding by SHHH. (Docket No. 01-309 January 9, 2003. "An Analysis of Inductive Coupling and Interference Issues in Digital Wireless Phones: Technically Feasible Solutions.") SHHH urges that the wireless industry continue to research innovative ways to address both types of interference.

Directional antennas, though they make the phones usable by many more hearing aid wearers through significant reduction of RF interference, do not make the phone compatible with telecoils in hearing aids and some cochlear implant processors. Hearing aid compatibility is a term taken from the original Hearing Aid Compatibility (HAC) Act of 1989 that means the ability of a phone to inductively couple with a hearing aid equipped with a telecoil. The Congressional mandate of the HAC Act was to "eliminate the disparity between hearing aid-users and non–users in obtaining access to the telephone network." (Senate Report at 7.) In order for all users of telecoil-equipped hearing devices to be able to use the full benefit of their hearing devices with phones, all phones should conform to the HAC Act, as wireline phones do already. We still await the FCC ruling on whether wireless phones also must comply with the law.

The directional antenna that MJI has designed, called an Interferometric Antenna Array (IAA), is described as an antenna accessory that can be incorporated into nearly any handset to significantly re-direct RF emissions from the wireless phone antenna. This means that initially, at least, it will be an accessory that consumers will have to purchase as an add-on to the phone. This is not a satisfactory solution in the long-term for consumers, who have told us repeatedly, that they do not want to gain access to wireless phones through costly or unwieldy accessories. However, based on MJI's statement in their petition that "the IAA can be ultimately designed into all handsets," SHHH supports MJI's petition for a rule change as it seems to offer a promising solution to RF interference. We urge industry to design directional antennas into the handsets so that it will no longer be an accessory.

Respectfully submitted,

Brenda Battat

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